**State of California**
Department of Food and Agriculture
Division of Measurement Standards

Certificate Number: 5366-04


# *California Type Evaluation Program*
## *Certificate of Approval*
## *for Weighing and Measuring Devices*

**For:**

Compressed Natural Gas (CNG)
Retail Motor Fuel Dispenser, Electronic Computing
Model: P -120
Capacity: Maximum Total Price $9 999.99
Maximum Total Volume 999 999*
Maximum Unit Price $9.999

**Submitted by:**

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**Standard Features and Options**

Card reader in dispenser (CRIND)
Integrated video display
Price computing capability
Receipt printer
Category 3 audit trail
Automatic 3000-psi/3600-psi fill pressure selection
Endress + Hauser Promass M sensor, 1/2" @ 55 lb/min
Endress + Hauser Promass 63 Transmitter

* Gasoline gallon equivalent or gasoline liter equivalent

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: January 12, 2004

Mike Cleary, Director

**Pinnacle CNG Systems**
**Compressed Natural Gas Retail Motor Fuel Dispenser**
**Model: P-120**

**Application:** For use as a stationary dispenser in retail motor fuel service stations for measuring compressed natural gas (CNG) as an automotive fuel.

**Identification:** The identification information is located on the right side of the dispenser frame between the top of the base cabinet and the bottom of the display compartment.

**Sealing:** The dispenser is sealed by category 3 (audit trail) method of sealing. Pinnacle CNG will issue to weights and measures officials, prior to an installation, an access card to be read by the card reader that will automatically print the audit trail to start the test session. Using the card will also print a fill receipt formatted to display the mass for testing purposes. The Promass 63 transmitter is sealed in accordance with the sealing requirements of its Certificate of Conformance. The Promass M sensor has no adjustable components which require the use of a security seal.

**Operation:** Prior to delivery, the hose must be connected to the receiving vehicle and the hose nozzle fill valve must be in the "open" position. The dispenser is then activated by sliding a Pinnacle fleet issued credit card through the card reader. Dispensing will begin automatically after the operator enters the correct video operations PIN number. The software version number will also be displayed when activated. Shut-off will occur automatically or the operator may end the fill. After filling, return the hose nozzle fill valve to the "off" position before returning the hose to the dispenser receptacle. Operation instructions are also displayed on the video display for the customer's convenience.

**Test Conditions:** The Model P-120 software version 750-842 was submitted for a field evaluation. The emphasis of the evaluation was on the device design, performance, interaction with the card reader, receipt format, and permanence. Five tests were conducted at four different flow rates ranging from 44 lb/min down to 2 lb/min. Tests were also conducted at varying pressure ranges and delivery amounts. Similar tests were conducted after approximately 75 days and 50 000 lb of throughput.

Results of the evaluation indicate the devices comply with applicable requirements.

**Type Evaluation Criteria Used:** Title 4, California Code of Regulations, 2003 Edition

**Tested By:** R. Norman Ingram (CA)